

REMARKS

Claims 9-11, and 13-16 are currently pending in the present application. Claims 9 and 16 are amended. Claim 12 is cancelled. No new matter is presented. In view of the above amendments to the claims and the following remarks, Applicants request the reconsideration of claims 9-11 and 13-16.

Applicants respectfully acknowledge the Examiner for the interview conducted on December 14, 2005. In the Interview, the Examiner indicated that by amending the claims to recite that the transducer produces ultrasonic signals would overcome the cited reference. In view of the discussion with the Examiner, claims 9 and 16 are amended to more clearly recite the features of the present invention.

The Examiner objected to the drawings for failing to show every feature of the claimed invention. More specifically, the Examiner indicates that the “one trapezoidal element” as recited in claim 12 must be illustrated or cancelled from the claims. Claim 12 is cancelled. Therefore the objection to the drawings is moot.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 12 is cancelled. Thus, the rejection of claim 12 is moot.

Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 3,612,778). The Examiner indicates that Murphy discloses all the features recited in claims 9-16 except for having raised portions in the backplate are caused by embossing. The Examiner further indicates that it would have been obvious to one skilled in the art to have raised portions in the backplate caused by embossing. Applicants respectfully traverse the rejection of claims 9-11, and 13-16.

Murphy discloses an electroacoustic transducer in which at least one of the electrodes is fixed to electrets, the electret electrode combination serving either as the diaphragm or the backplate of the transducer. The diaphragm is imperforate and the backplate is perforated. An elevated spacer on the backplate contacts the diaphragm at regular intervals to prevent sticking and to control the acoustic response.

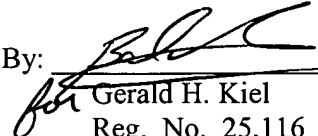
Claims 9 and 16 are amended to more clearly recite the features of the claimed invention. In particular, claims 9 and 16 are amended to recite that the transducer of the claimed invention produces ultrasonic signals. Murphy, however, does not teach or suggest a transducer which produces an ultrasonic signal. More specifically, the dimensions of the transducer described by Murphy cannot produce the ultrasonic signal. (See Column 5, Lines 71 – Column 6, Line 16).

In addition, Murphy does not teach or suggest that the fringe effects on the edges of the posts as in the claimed invention. As a result, Murphy fails to teach or suggest the benefits associated with the excitation of the diaphragm. Moreover, Murphy cannot provide the fringe effects since structurally the spacing between the integral post of Murphy, is too large to allow fringe effects to stretch across the spacing. Thus, in view of the amendments to claims and the distinctions, provided, it is respectfully submitted that Murphy fails to teach or suggest all the features of the claimed invention. Specifically, Murphy fails to teach or suggest the distance between two adjacent webs is selected to be smaller than the width of the webs such that fringe effects of the excitation of the diaphragm by the plurality of webs occurs at the edges of the adjacent webs bridge the distance and the ultrasonic transducer producing an ultrasonic signal. Therefore, Applicants request the withdrawal of the rejection of claims 9 and 16 under 35 U.S.C. 103(a).

Claims 10, 11, and 13-15 are dependent upon independent claim 9, therefore, it is respectfully submitted that for at least the reasons mentioned above claims 10, 11, and 13-15 recite subject matter that is neither taught or suggested by the applied reference. Accordingly, Applicants request the withdrawal of the rejection of claims 10, 11, and 13-15.

Based upon the above amendments and remarks, Applicant respectfully requests the allowance of claims 9-11 and 13-16. Should the Examiner feel that a telephone conference with Applicant's attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Respectfully submitted,

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